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7/18/02

Attorney Docket No.: 00P7825US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Ramon Alfredo Carvalho
Siochi

Application No.: 09/642,183

Filed: 08/17/2000

For: High Definition Conformal Arc
Radiation therapy With a Multi-Leaf
Collimator

Group Art Unit: 2882

Examiner: C. Thomas

CERTIFICATE OF FACSIMILE TRANSMISSION

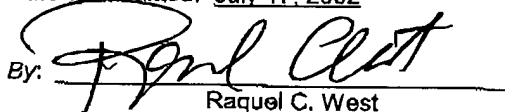
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Raquel C. West

RESPONSE TO TELEPHONE REQUEST

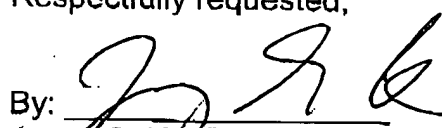
Assistant Commissioner for Patents
Washington, DC 20231

Dear Sir:

Pursuant to a telephone request from Examiner David Irvin enclosed is page
14, line 21 with the missing serial number.

Siemens Corporation
Intellectual Property Dept.
186 Wood Avenue South
Iselin, New Jersey 08830
ATTENTION: Elsa Keller, IP Dept.
Telephone: (732) 321-3026

Respectfully requested,

By: 
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Attorney for Applicants
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degree offset orientation. Leaves 202 (shown in phantom in Fig. 5) extend longitudinally along the y-axis when the collimator is positioned in a ninety degree offset position. Fig. 5 illustrates that the resolution at the border of the treatment area can be increased by applying the radiation in two different collimator orientations. The leaves 200, 202 may also be moved longitudinally while the collimator remains in its same orientation to further increase the resolution. The number of leaf positions and collimator orientations used in a radiation treatment depend on how fine a resolution or "smooth" a contour is desired. Any number of intensity fields may be used to deliver the radiation at different collimator orientations and various longitudinal leaf positions to provide the desired contour along a periphery edge of the treatment area.

If the radiation is to be delivered through more than two treatment fields the leaves will be repositioned while the collimator is in its zero degree offset position, ninety degree offset position, or both positions. For example, the leaves may be positioned to define a first treatment field with the collimator in its zero degree offset position and the gantry 36 moved through an arc from a first position A to a second position B (Fig. 4). While the gantry 36 is in position B, the leaves are moved longitudinally to slightly increase the area through which the radiation is delivered to define a second treatment field (i.e., opposing leaf pairs are moved away from one another. The position of the leaves relative to the treatment field may be defined as described in U.S. Patent Application Serial No. _____ (Atty. Docket No. 99E9456US), by A. Siochi, which is incorporated herein by reference,

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